

FIG.1

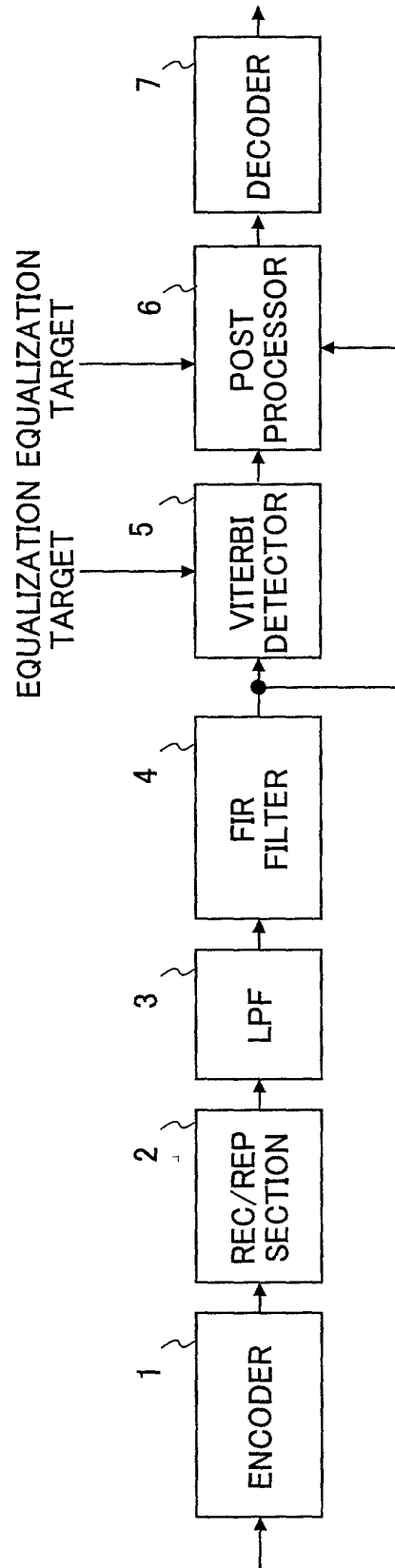


FIG. 2

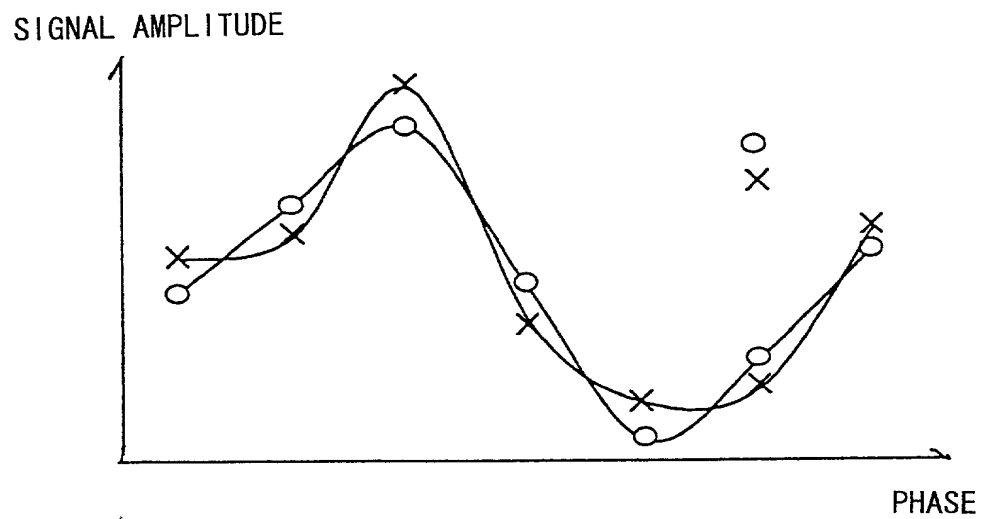


FIG.3

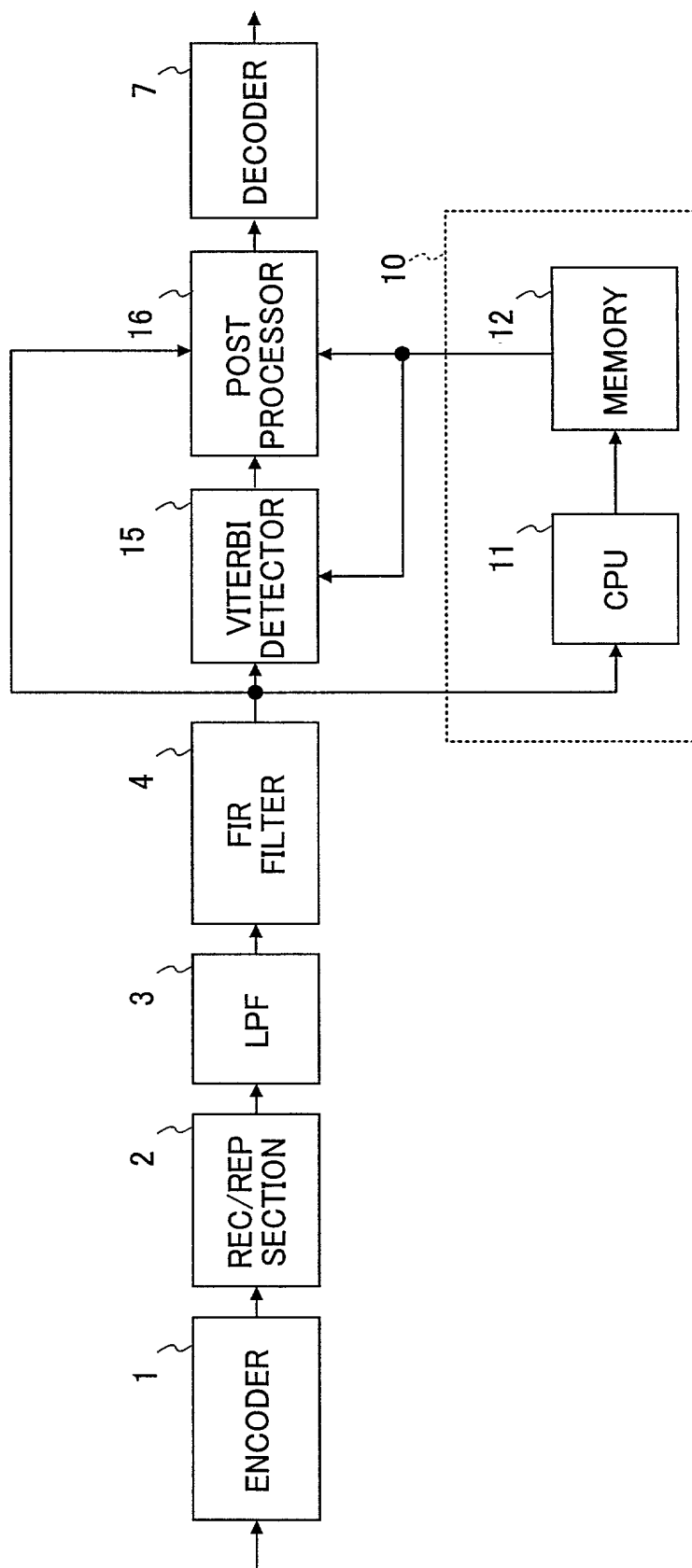


FIG.4

ak-3ak-2ak-1ak	EQUALIZATION OUTPUT bk	
	IDEAL EQUALIZATION VALUE	AVERAGE VALUE OF ACTUAL EQUALIZED WAVEFORM
0000	0	$\mu_0$
0001	+1	$\mu_1$
0010	+1	$\mu_2$
0011	+2	$\mu_3$
0100	-1	$\mu_4$
0101	0	$\mu_5$
0110	0	$\mu_6$
0111	+1	$\mu_7$
1000	-1	$\mu_8$
1001	0	$\mu_9$
1010	0	$\mu_{10}$
1011	+1	$\mu_{11}$
1100	-2	$\mu_{12}$
1101	-1	$\mu_{13}$
1110	-1	$\mu_{14}$
1111	0	$\mu_{15}$

FIG.4

**FIG.5**

$a_k - 2a_{k-1}a_k$	STATE
000	$S_0$
001	$S_1$
010	$S_2$
011	$S_3$
100	$S_4$
101	$S_5$
110	$S_6$
111	$S_7$

FIG.6

STATE OF 1 BIT BEFORE	PRESENT STATE			PRESENT EQUALIZATION OUTPUT $b_k$		
	IDEAL VALUE		AVERAGE VALUE OF ACTUAL EQUALIZED WAVEFORM			
	$a_k$	$a_k$		$a_k$	$a_k$	$a_k$
$S_0$	$S_0$	$S_1$	0	+1	$\mu_0$	$\mu_1$
$S_1$	$S_2$	$S_3$	+1	+2	$\mu_2$	$\mu_3$
$S_2$	$S_4$	$S_5$	-1	0	$\mu_4$	$\mu_5$
$S_3$	$S_6$	$S_7$	0	+1	$\mu_6$	$\mu_7$
$S_4$	$S_0$	$S_1$	-1	0	$\mu_8$	$\mu_9$
$S_5$	$S_2$	$S_3$	0	+1	$\mu_{10}$	$\mu_{11}$
$S_6$	$S_4$	$S_5$	-2	-1	$\mu_{12}$	$\mu_{13}$
$S_7$	$S_6$	$S_7$	-1	0	$\mu_{14}$	$\mu_{15}$

FIG. 7

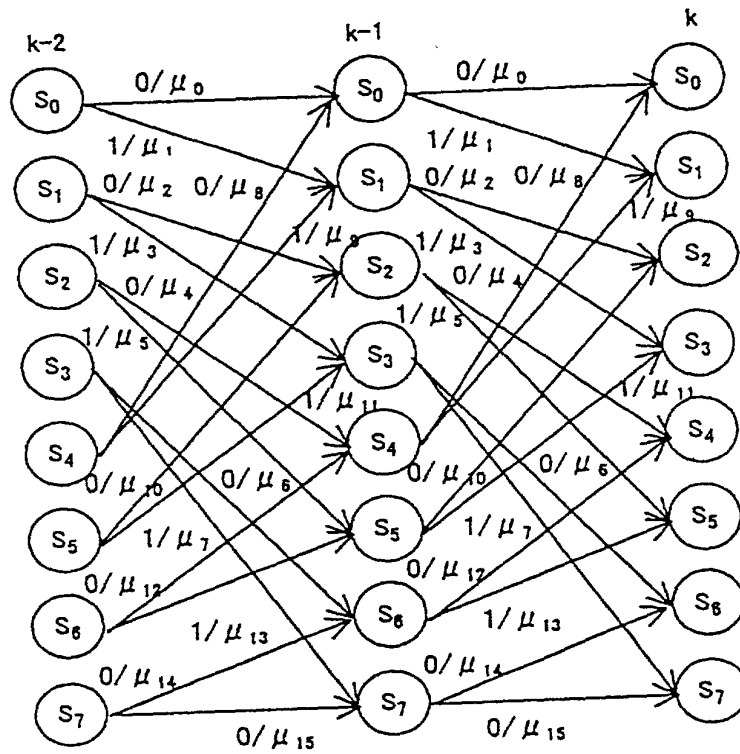


FIG. 8

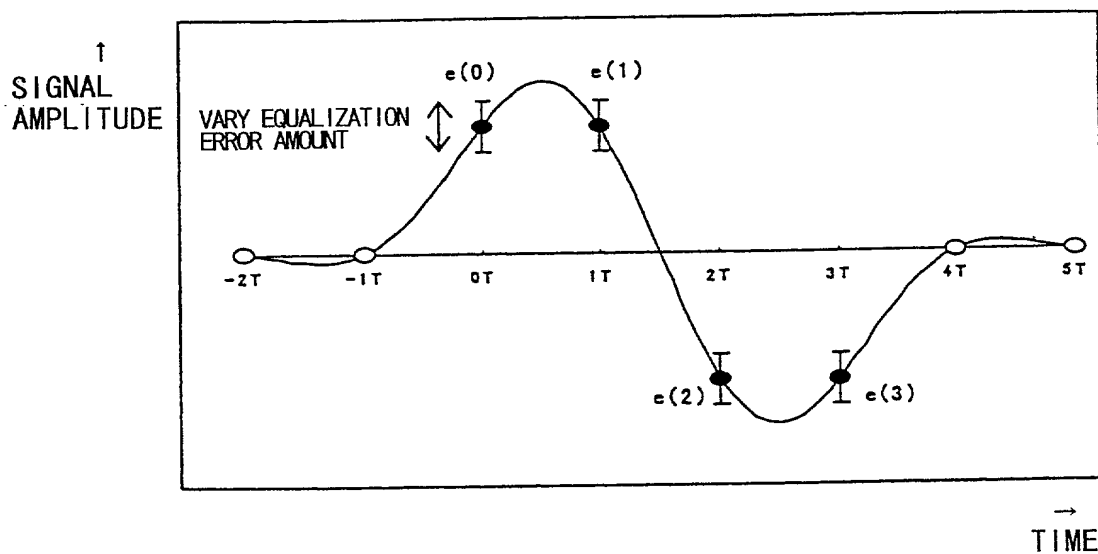


FIG. 9

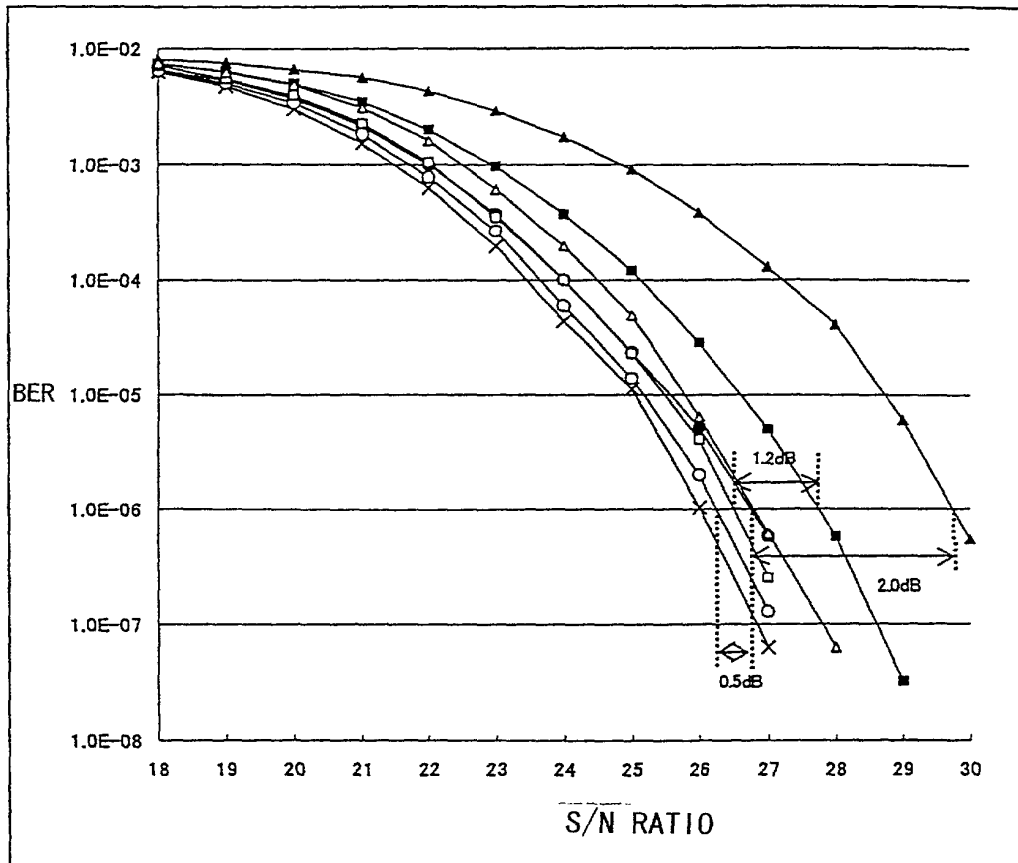
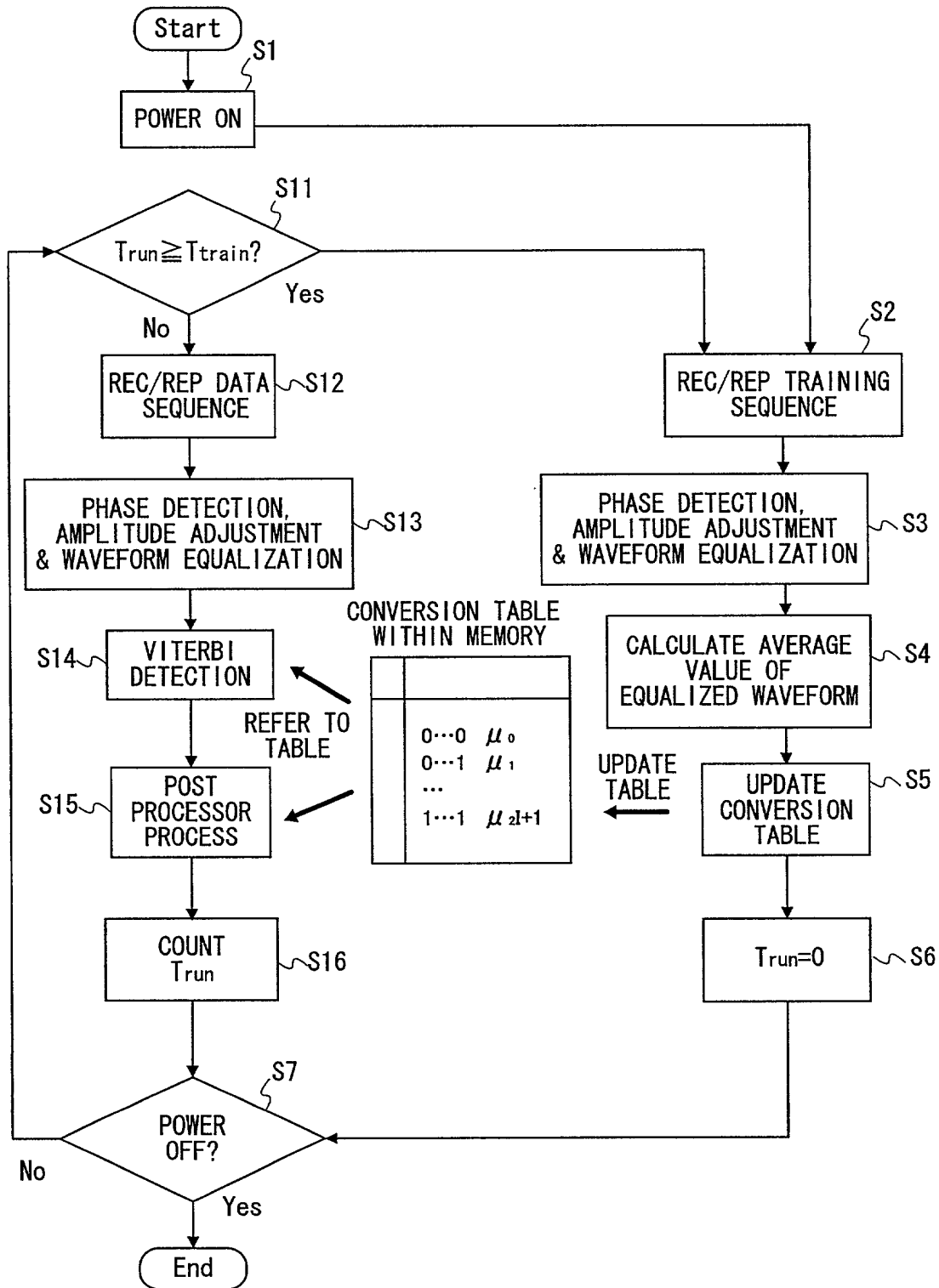


FIG.10



$a_{k-2}$	$a_{k-1}$	$a_k$	COMPENSATION AMOUNT
0	0	1	—
0	1	1	$T_{01}$
1	0	1	$T_{10}$
1	1	1	$T_{11}$

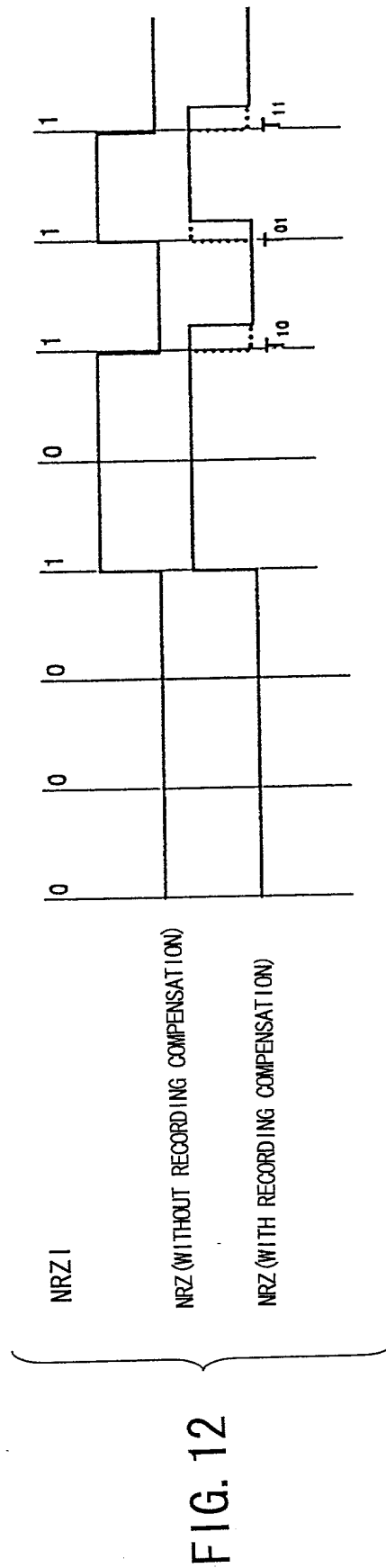
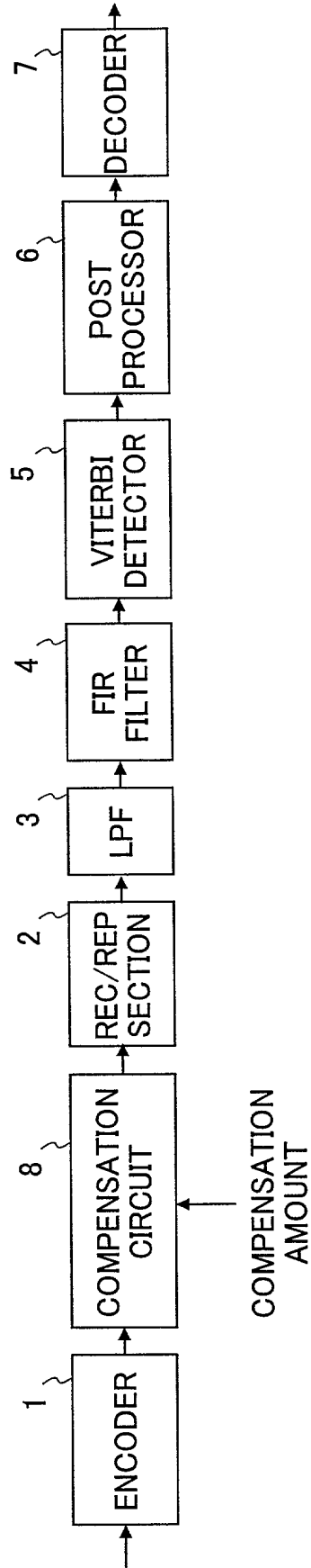
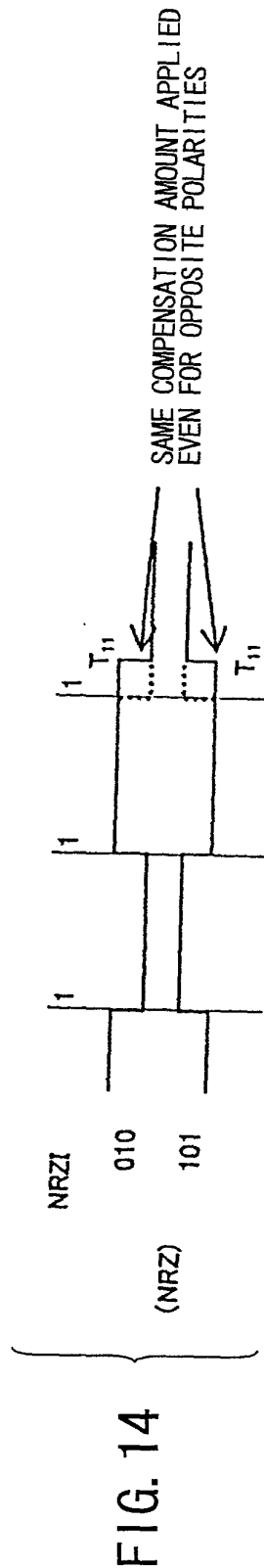


FIG.13





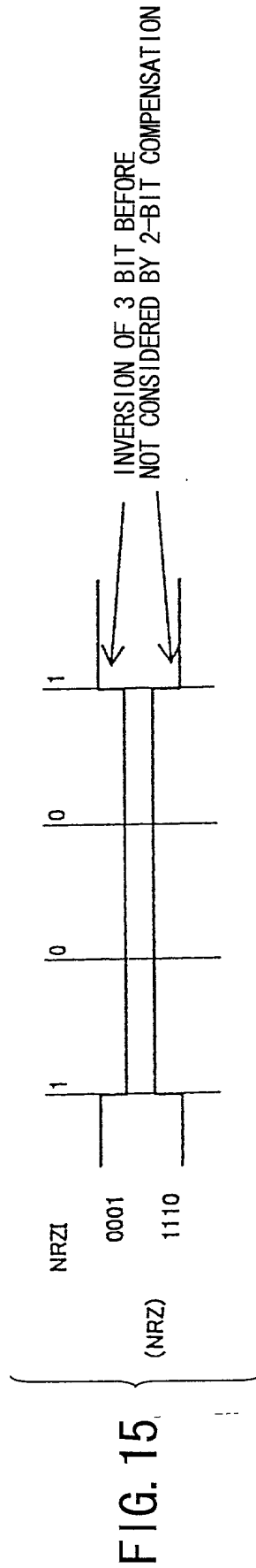


FIG.16

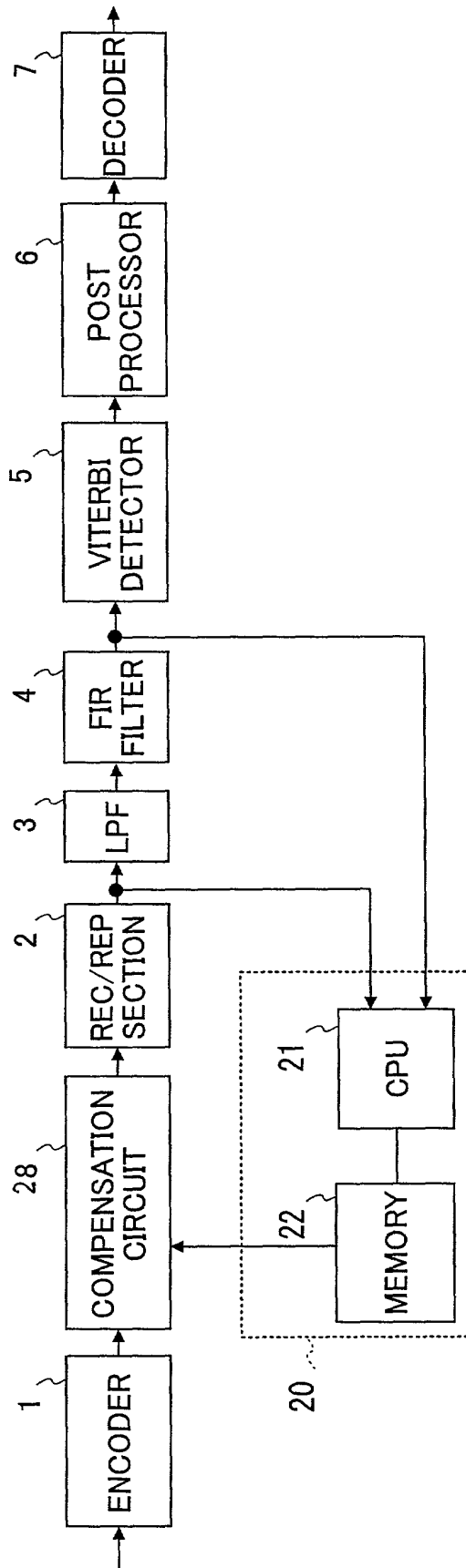
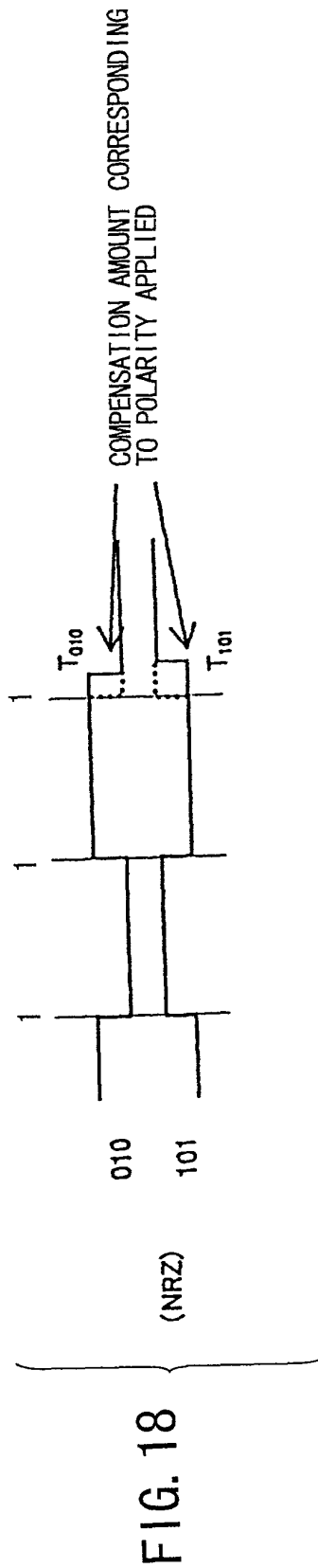


FIG.17

$a_{k-1}$	$\dots$	$a_k$	$\dots$	$a_{k+1}$	POLARITY	COMPENSATION AMOUNT
0	$\dots$	1	$\dots$	0	+	$T_{0\dots 1\dots 0+}$
	$\dots$		$\dots$		-	$T_{0\dots 1\dots 0-}$
$\dots$	$\dots$	$\dots$	$\dots$	$\dots$	$\dots$	$\dots$
1	$\dots$	1	$\dots$	1	+	$T_{0\dots 1\dots 1+}$
					-	$T_{0\dots 1\dots 1-}$



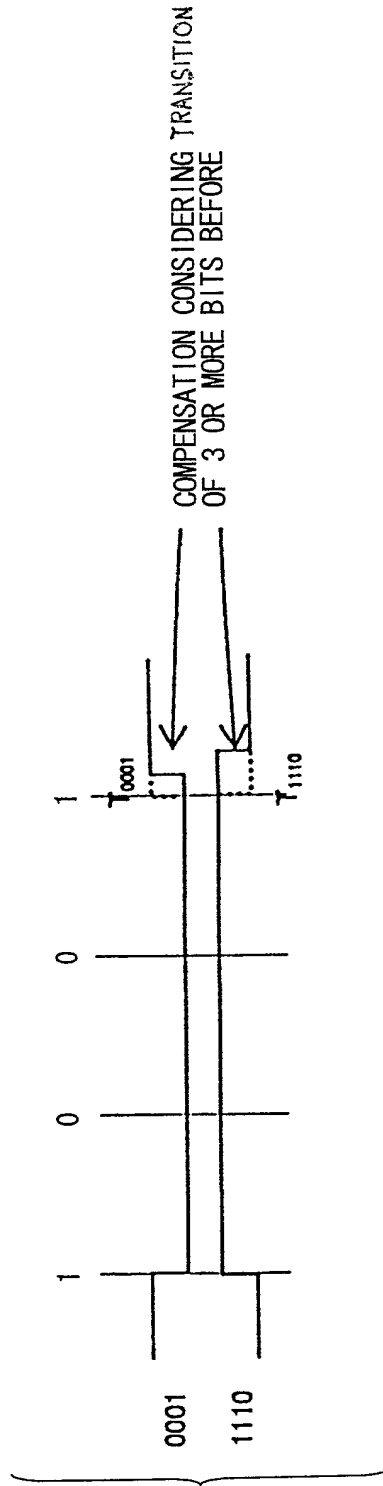


FIG. 19

FIG.20

RECORDING SEQUENCE					AVERAGE VALUE $w(t)$ ( $-1 \leq t \leq 1$ ) OF OVER-SAMPLED REPRODUCED OR EQUALIZED WAVEFORM						
$a_{k-1}$	...	$a_k$	...	$a_{k+1}$	POLARITY	$w(-1)$	...	$w(0)$	...	$w(1)$	...
0	...	1	...	0	+	$W(-1)0 \cdots 1 \cdots 0+$	...	$W(0)0 \cdots 1 \cdots 0+$	...	$W(1)0 \cdots 1 \cdots 0+$	...
					-	$W(-1)0 \cdots 1 \cdots 0-$	...	$W(0)0 \cdots 1 \cdots 0-$	...	$W(1)0 \cdots 1 \cdots 0-$	...
0	...	1	...	0	+	$W(-1)0 \cdots 1 \cdots 1+$	...	$W(0)0 \cdots 1 \cdots 1+$	...	$W(1)0 \cdots 1 \cdots 1+$	...
					-	$W(-1)0 \cdots 1 \cdots 1-$	...	$W(0)0 \cdots 1 \cdots 1-$	...	$W(1)0 \cdots 1 \cdots 1-$	...
...	...	...	...	...	...	...	...	...	...	...	...
1	...	1	...	0	+	$W(-1)1 \cdots 1 \cdots 0+$	...	$W(0)1 \cdots 1 \cdots 0+$	...	$W(1)1 \cdots 1 \cdots 0+$	...
					-	$W(-1)1 \cdots 1 \cdots 0-$	...	$W(0)1 \cdots 1 \cdots 0-$	...	$W(1)1 \cdots 1 \cdots 0-$	...
1	...	1	...	1	+	$W(-1)1 \cdots 1 \cdots 1+$	...	$W(0)1 \cdots 1 \cdots 1+$	...	$W(1)1 \cdots 1 \cdots 1+$	...
					-	$W(-1)1 \cdots 1 \cdots 1-$	...	$W(0)1 \cdots 1 \cdots 1-$	...	$W(1)1 \cdots 1 \cdots 1-$	...

FIG. 21

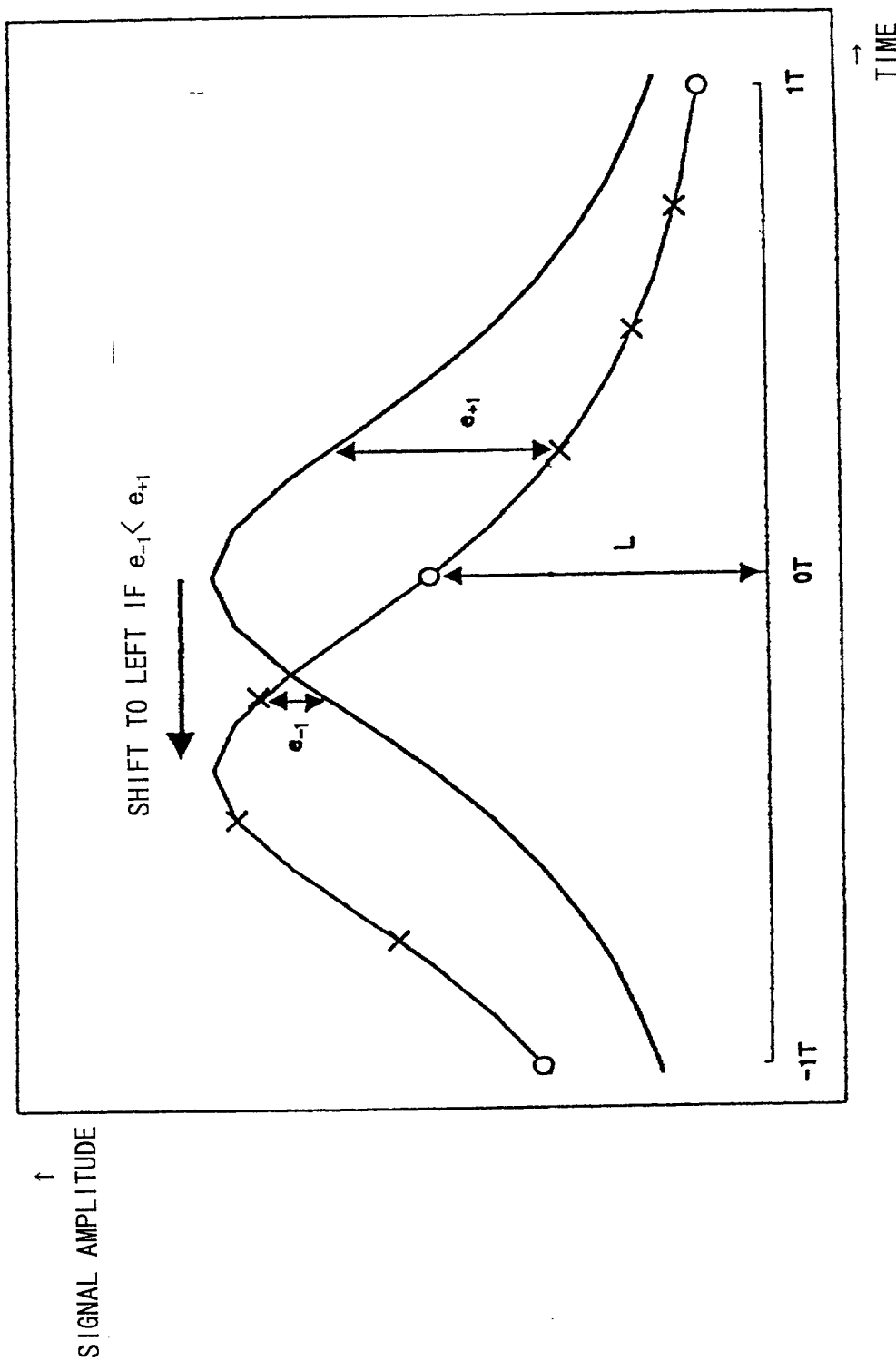


FIG. 22

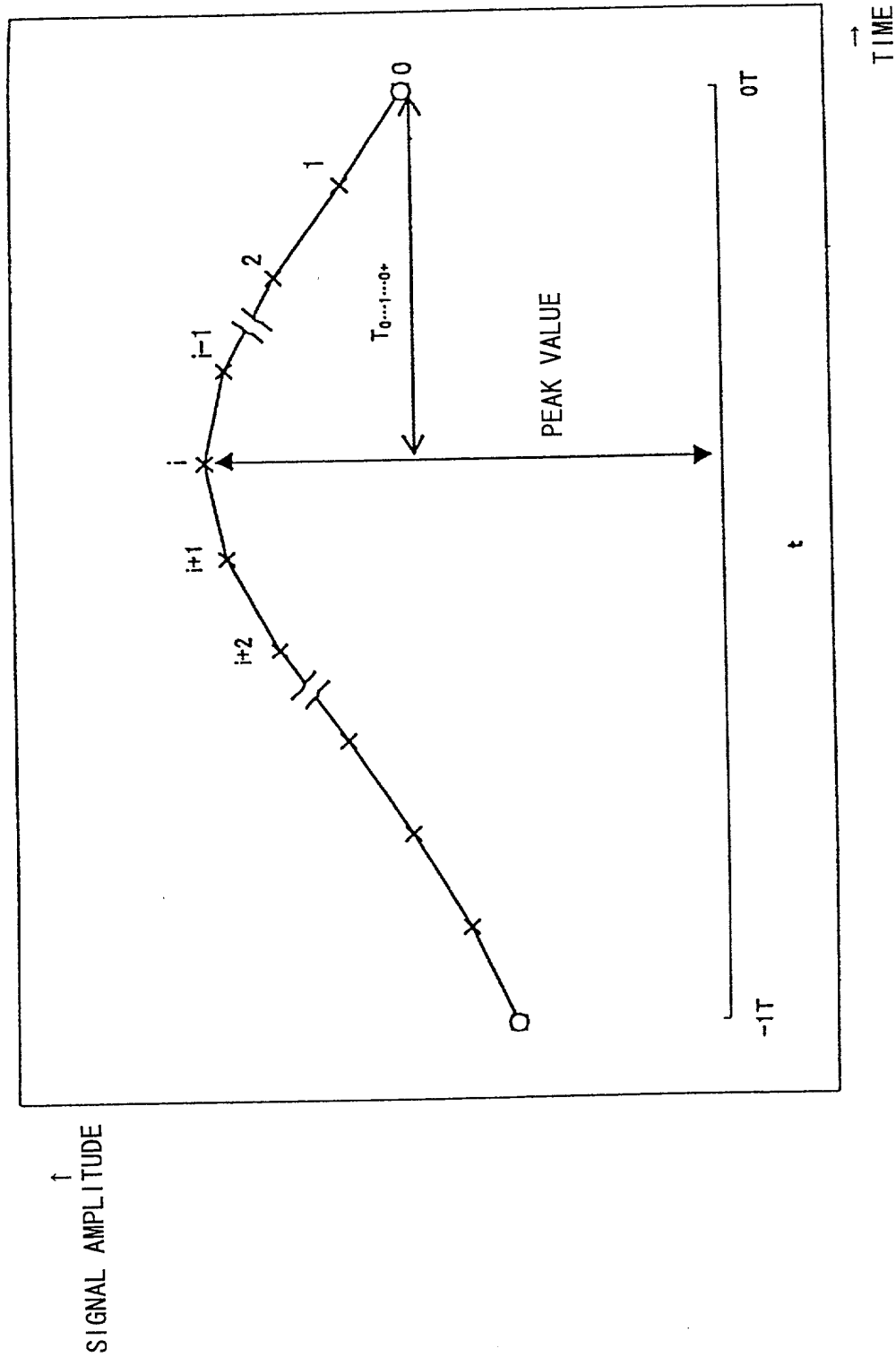


FIG. 23

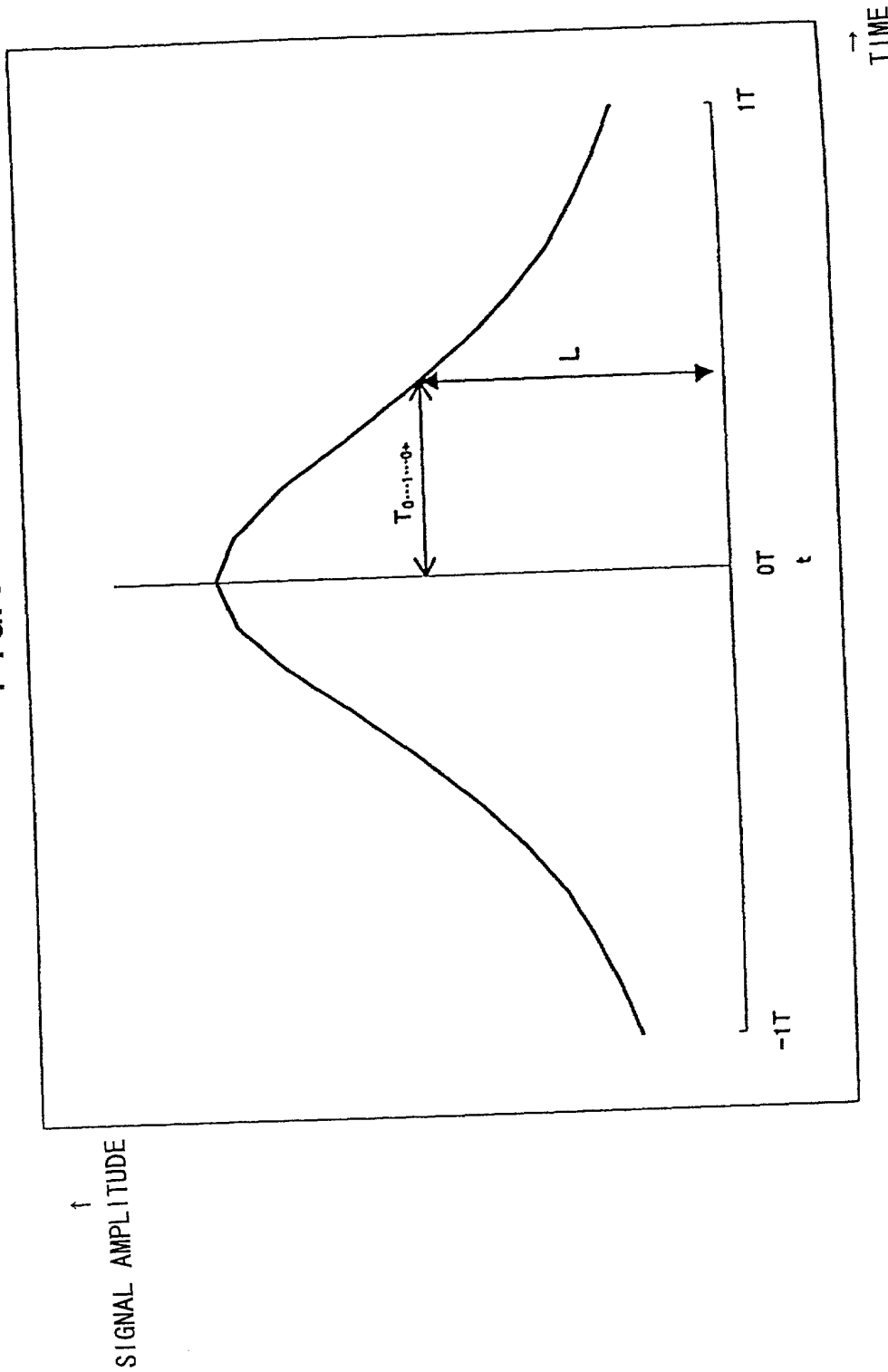


FIG.24

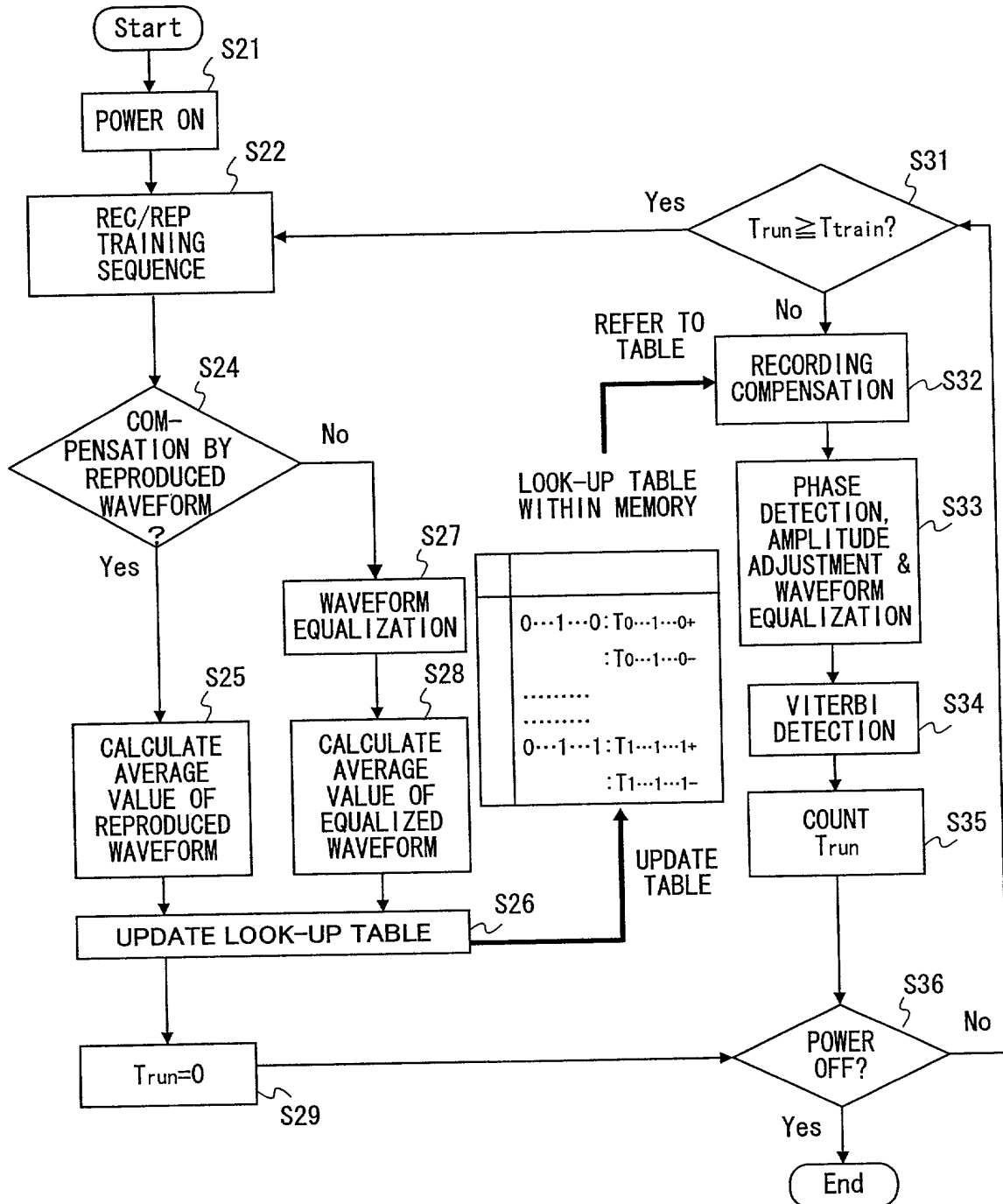


FIG.25

